Proposed Project Upper Little Patuxent

Project Number: LPX3\_05 Subwatershed: Little Patuxent 3

Project Type: Pond Retrofit

Project Size: 23.3 acre drainage area/ 4.2

acres impervious

**Project Location**: Along Pebble Beach Drive between Eagles Mere Court and River Falls

Court





**Project Description**: This project would entail retrofitting an existing pond off of Pebble Beach Drive. The pond would be excavated to increase detention volume to provide pollutant removal to current design standards. The design would incorporate water quality features such as a micropool, aquatic bench, forebay and meandering flow path. Because the project would contain standing water and is located near private residences, property owners would be kept informed and involved in the planning and design process.

## **Project Benefits:**

Water Quality

Conversion to a wet pond / wetland designed to current standards would provide water

quality treatment and pollutant removal.

**Project Constraints:** 

Environmental No environmental constraints are anticipated with this project.

Property Ownership

This project is located on County-owned open space (Turf Valley Overlook natural

resource open space).

Facility Access Access to this site is obtained from Pebble Beach Drive.

Design / Construction No significant design or construction issues were noted.

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## **Cost Detail:**

ITEM	QTY	UNITS	UNIT COST	TOTAL
Site Work				
Clear and Grub	0.2	AC	\$5,000.00	\$1,050
Pavement / Sidewalk Removal		SY	\$7.50	\$0
Curb-Gutter Removal		LF	\$10.00	\$0
Remove Pilot Channels		LF	\$6.00	\$0
Remove Barrel Pipe		LF	\$77.00	\$0
Pond Construction				
Grading and Excavation (Class I)	672	CY	\$30.00	\$20,160
Hauling and Disposal	672	CY	\$20.00	\$13,440
Embankment		CY	\$60.00	\$0
Forebay		CY	\$45.00	\$0
Safety bench	231	CY	\$30.00	\$6,930
Riser	1	LS	\$10,000.00	\$10,000
Outflow Pipe		LF	\$80.00	\$0
Outlet Protection	1	LS	\$8,000.00	\$8,000
Rip Rap Stabilization		LF	\$50.00	\$0
SWM Landscaping	980	SY	\$10.00	\$9,800
			<b>Direct Construction Subtotal</b>	\$69,380
Indirect Costs				
E/SC, MOT, MOS (20% of Directs or \$10,000)	1	LS	\$13,876.00	\$13,876
Construction Stakeout (\$1,000/Day)	3	Day	\$3,000.00	\$3,000
			Base Construction Cost	\$86,256
			Mobilization (10% of Directs or \$1,000)	\$6,938
			Subtotal	\$93,194
			Contingency (30%)	\$27,958
			Construction Subtotal	\$121,152
	Envt'l	Studies / F	Permitting (5% of Construction or \$5,000)	\$6,058
Engineering and Surveys (25% of Construction or \$40,000, maximum				\$40,000
			Total Capital Cost	\$167,210
Operations and Maintenance Costs				
Annual Maintenance	6	Percent	\$4,163	
Discount Rate	5	Percent		
Expected Life	20	Years		
			Net Present Value of O&M Costs	\$51,878
			Life Cycle Cost	\$219,100